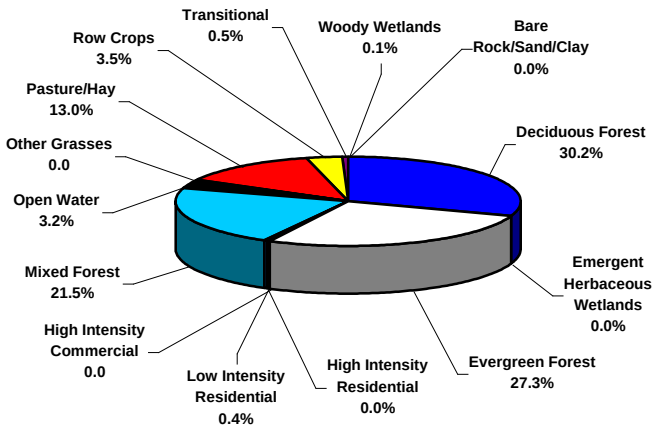
Summary – Little Tennessee River

In 1996, the Tennessee Department of Environment and Conservation Division of Water Pollution Control adopted a watershed approach to water quality. This approach is based on the idea that many water quality problems, like the accumulation of point and nonpoint pollutants, are best addressed at the watershed level. Focusing on the whole watershed helps reach the best balance among efforts to control point sources of pollution and polluted runoff as well as protect drinking water sources and sensitive natural resources such as wetlands. Tennessee has chosen to use the USGS 8-digit Hydrologic Unit Code (HUC-8) as the organizing unit.

The Watershed Approach recognizes awareness that restoring and maintaining our waters requires crossing traditional barriers (point *vs.* nonpoint sources of pollution) when designing solutions. These solutions increasingly rely on participation by both public and private sectors, where citizens, elected officials, and technical personnel all have opportunities to participate. The Watershed Approach provides the framework for a watershed-based and community-based approach to address water quality problems.

Chapter 1 of the Little Tennessee River Watershed Water Quality Management Plan discusses the Watershed Approach and emphasizes that the Watershed Approach is not a regulatory program or an EPA mandate; rather it is a decision-making process that reflects a common strategy for information collection and analysis as well as a common understanding of the roles, priorities, and responsibilities of all stakeholders within a watershed. Traditional activities like permitting, planning and monitoring are also coordinated in the Watershed Approach.

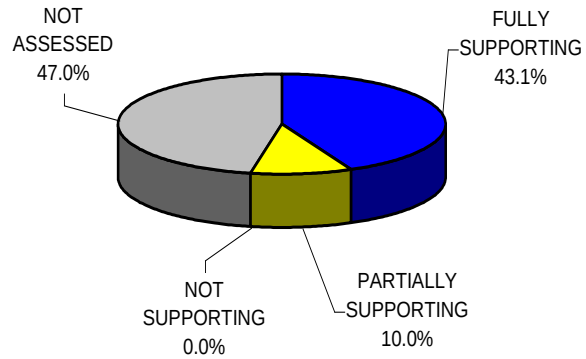
A detailed description of the watershed can be found in Chapter 2, to include information on location, population, hydrology, land use and natural and cultural resources. The Tennessee portion of the Little Tennessee River Watershed is approximately 783 square miles and includes parts of 3 Tennessee counties. A part of the Tennessee River drainage basin, the watershed has 1,082 stream miles and 18,878 lake acres in Tennessee.



Land Use Distribution in the Tennessee Portion of the Little Tennessee River Watershed.

There are three greenways, eleven interpretive areas, and three wildlife management areas located in the watershed. One hundred thirty rare plant and animal species have been documented in the watershed, including twelve rare fish species, two rare mussel species, and nine rare snail species.

A review of water quality sampling and assessment is presented in Chapter 3. Using the Watershed Approach to Water Quality, 68 sampling events occurred in the Tennessee portion of the Little Tennessee River Watershed in 1999-2000. These were conducted at ambient, ecoregion or watershed monitoring sites. Monitoring results support the conclusion that 43.1% of total stream miles fully support designated uses.



Water Quality Assessment for Streams and Rivers in the Tennessee Portion of the Little Tennessee River Watershed. Assessment data are based on the 2002 Water Quality Assessment of 1,081.5 miles in the watershed.

Also in Chapter 3, a series of maps illustrate Overall Use Support in the watershed, as well as Use Support for the individual uses of Fish and Aquatic Life Support, Recreation, Irrigation, and Livestock Watering and Wildlife. Another series of maps illustrate streams that are listed for impairment by specific causes (pollutants) such as Pathogens, Polychlorinated biphenyls, and Siltation.

Point and Nonpoint Sources are addressed in Chapter 4. Chapter 4 is organized by HUC-10 subwatersheds. Maps illustrating the locations of STORET monitoring sites and USGS stream gauging stations are presented in each subwatershed.

The Tennessee Portion of the Little Tennessee River Watershed is Composed of Four USGS-Delineated Subwatersheds (10-Digit Subwatersheds).

Point source contributions to the Tennessee portion of the Little Tennessee River Watershed consist of eight individual NPDES-permitted facilities, five of which discharge into streams that have been listed on the 1998 303(d) list. Other point source permits in the watershed are Aquatic Resource Alteration Permits (4), Tennessee Multi-Sector Permits (19), Mining Permits (3), Ready-Mix Concrete Plant Permits (3) and Concentrated Animal Feeding Operation Permits (1). Agricultural operations include cattle, chicken, hog, and sheep farming. Maps illustrating the locations of NPDES and ARAP permit sites are presented in each subwatershed.

Chapter 5 is entitled *Water Quality Partnerships in the Little Tennessee River Watershed* and highlights partnerships between agencies and between agencies and landowners that are essential to success. Programs of federal agencies (Natural Resources Conservation Service, Tennessee Valley Authority, U.S. Fish and Wildlife Service, U.S. Geological Survey, USDA Forest Service and National Park Service), and state agencies (TDEC Division of Community Assistance, TDEC Division of Water Supply, Tennessee Department of Agriculture and North Carolina Department of Environment and Natural Resources) are summarized. Local initiatives of active watershed organizations (Watershed Association of Tellico Reservoir) are also described.

Point and Nonpoint source approaches to water quality problems in the Tennessee portion of the Little Tennessee River Watershed are addressed in Chapter 6. Chapter 6 also includes comments received during public meetings, along with an assessment of needs for the watershed.

The full Little Tennessee River Watershed Water Quality Management Plan can be found at: http://www.state.tn.us/environment/wpc/watershed/wsmplans/